January 6, 2006

NOAA Gulf of Mexico News

NOAA Study Shows Value of PORTS© Program to Marine Transportation Industry

Tampa Bay System Is First to Quantify Economic Benefits

The Tampa Bay economy receives more than $7 million a year in savings and direct income from the operation of the Physical Oceanographic Real-Time System® (PORTS©), according a new NOAA sponsored study. The report details the first study of the navigational aid which is in operation at 13 major ports across the United States. Tampa's PORTS© system provides accurate real-time oceanographic information tailored to the specific needs of the 6,700 commercial vessels transiting Tampa Bay each year.

"The PORTS© system is a good example of how research and observing system development expertise can be applied to support safe, efficient and environmentally sound marine transportation," said retired Navy Vice Admiral Conrad C. Lautenbacher, Jr., Ph.D., under secretary of commerce for oceans and atmosphere and NOAA administrator. "Tampa Bay PORTS is an excellent example of NOAA'S creativity and technological expertise," said Richard Wainio, port director and chief executive officer of the Tampa Port Authority. Tampa Bay maritime users have realized enhanced navigational safety while transiting the long channels of the harbor. This has resulted in more efficient loading logistics, enhanced vessel traffic management, and better protection of the environment and citizens of the Tampa Bay region. It is especially helpful for both planning and maintaining the flow of maritime commerce, during periods of disturbed weather conditions."

"This study validated what we have been hearing for some time," said Mike Szabados, director of the NOAA's Ocean Service Center for Operational Oceanographic Products and Services. "It quantified the benefits as being far greater than the cost of the system and demonstrates that the system provides valuable support for the safe and efficient maritime commerce necessary for a healthy economy. The benefits are not just good, they are impressive."

The most significant change in maritime shipping operations in the bay in the 1990s occurred when Harbor pilots onboard vessels began using portable computers to access PORTS© in real-time. During this time, groundings decreased by half. With tankers accounting for 2,200 transits per year, the 50% reduction in groundings translates into a conservative estimate of $2.8 million in avoided costs annually. The PORTS© system was installed in Tampa in 1990. The system provides real-time data available to load ships to drafts 12 inches or more above what had been considered the safe guideline. The additional capacity for the phosphate trade alone in Tampa Bay could equal an increased benefit of $1.1 million each year. Even though hazardous chemical spills in Tampa Bay are rare, at a conservative estimate the additional efficiency and accuracy of applying these data would avoid nearly $1.8 million per year in losses.

PORTS© data are used to enhance area weather and coastal marine forecasts, particularly coastal flooding. Tampa Bay is considered one of the most storm surge threatened areas in the country because of its large coastal population and its geography. Applying PORTS© data risk formulas for forecasts in the area gives it an estimated yearly value of $2 million. Recreational boaters, using better real-time information available through PORTS©, may make more excursions, bringing an estimated $946,000 to the economy each year. Fishermen looking for water temperature and tidal data to improve their catch contribute another estimated $150,000 per year in port area income.

The report was authored by Hauke Kite-Powell, Ph.D., of the Woods Hole Oceanographic Institute Marine Policy Center, who designed the method of identifying as well as collecting and quantifying the data. The Tampa study was the first application of the methodology which NOAA plans to use in evaluation of PORTS© systems in Houston and New York in 2006. PORTS© systems also operate in San Francisco Bay; Chesapeake Bay, which serves Delaware, Maryland and Virginia; Narragansett Bay, Rhode Island; Soo Locks, Michigan; Los Angeles/Long Beach, California; Delaware River and Bay; Tacoma, Washington; Port of Anchorage, Alaska; New Haven, Connecticut and the Lower Columbia River, bordering Oregon and Washington.

Emergency Managers Have New Tool for 2006 Hurricane Season

A recently expanded version of the Inland Flood Planning and Response Tool allows emergency managers in New England to quickly compare flood inundation maps with forecasts of rainfall and river levels. The tool facilitates better planning, decision making, and response efforts to manage inland flooding. Developed by the Federal Emergency Management Agency and NOAA's National Weather Service and Coastal Services Center, the tool is part of HURREVAC, a national hurricane evacuation computer program. For more information, visit www.hurrevac.com or contact Doug.Marcy@noaa.gov.

Office of Ocean and Coastal Resource Management Announces New Southern Louisiana Portfields Pilot Program

OCRM staff participated in the quarterly meeting of the Port Association of Louisiana (PAL) in Baton Rogue, LA. The PAL meeting is attended by forty representatives from port authorities throughout Louisiana. Kenneth Walker made a presentation on the Portfields Initiative and announced the new Southern Louisiana Portfields pilot. The kickoff meetings for the Southern Louisiana Portfields pilot will be held April 24-26 in New Orleans and Lafayette/Lake Charles, LA. For more information, contact Kenneth.Walker@noaa.gov.

Navigation Response Team Helps Rapidly Reopen Calcasieu Ship Channel

On December 18, a tug and barge struck an unknown object in the Calcasieu Ship Channel near Lake Charles in southwest Louisiana, causing the U.S. Coast Guard (USCG) to restrict traffic until the hazard could be located. A U.S. Army Corps of Engineers survey team failed to locate the obstruction. So at the request of USCG, the Office of Coast Survey deployed a Navigation Response Team (NRT) from Houston to Lake Charles to assist with surveying. The NRT completed its last survey segment on December 20, finding no obstruction, which enabled the Captain of the Port to reopen the channel with no restrictions. A traffic plan for vessels waiting to enter and leave the port was instituted immediately. This incident highlights the potential extent to which unknown hazards from this year's hurricanes continue to affect marine transportation. For more information, contact Tim Osborn.

Other NOAA News

NOAA Teacher at Sea Program Launches New Web Site

Dec. 28, 2005 — NOAA's Teacher at Sea program launched a new Web site, better enabling teachers from kindergarten through college to find and apply for opportunities to get first-hand research experience aboard NOAA hydrographic, oceanographic and fisheries research vessels. Teachers who sail aboard NOAA ships write daily logs of their experiences and e-mail them to the NOAA program coordinator. The new Web site's main feature allows access to these logs, which include information about sea temperatures and other data, research of the day, and interviews with scientists and crew. The logs also contain personal reflections that give insight into what life at sea is really like. Interested educators can also access the materials needed to apply to the NOAA Teacher at Sea program, while program alumni can use the site to keep in touch.

The mission of NOAA's Teacher at Sea program is to give teachers a clearer insight into our ocean planet and a greater understanding of maritime work and studies, and to foster an interdisciplinary educational experience that provides a unique environment for learning and teaching. The enthusiasm for learning about science that is generated between teachers and students is the biggest payoff of the program, according to teachers who have participated in it. Now in its 15th year, the education program has enabled more than 430 teachers to gain first-hand experience in science at sea. Teachers can enrich their science lesson plans with a depth of understanding made possible by living and working side-by-side, day and night, with those who contribute to the world's body of scientific knowledge.

"This new Web site will make it easier for teachers to see what it's like to be a NOAA teacher at sea and apply for the program. The program continues to be an effective way to introduce educators to NOAA science in a personal way that helps them bring science alive for their students," said Rear Admiral Samuel P. De Bow Jr., NOAA Corps, director of the NOAA Office of Marine and Aviation Operations.

"The education program has been so successful, we're expanding it to make sure more teachers have an opportunity to participate and improve their research skills. It benefits NOAA as well. Enthusiastic teachers make great assistants and tend to boost the morale of everyone on board. After spending a couple of weeks on a ship, they also are able to offer career information to their students about the various shipboard jobs. We are always looking for good NOAA recruits! All around, it's a win-win situation," De Bow said. The NOAA Ocean Service Special Projects Office created the new Teacher at Sea Web site.

The NOAA Teacher at Sea program is administered by the NOAA Office of Marine and Aviation Operations. The NOAA Office of Marine and Aviation Operations is responsible for operating, managing and maintaining NOAA's fleet of research and survey ships and aircraft, and is composed both of civilians and officers of the NOAA Commissioned Corps, one of the nation's seven uniformed services.

NOAA, an agency of the U.S. Department of Commerce, is dedicated to enhancing economic security and national safety through the prediction and research of weather and climate-related events and providing environmental stewardship of the nation's coastal and marine resources.

Through the emerging Global Earth Observation System of Systems (GEOSS), NOAA is working with its federal partners and nearly 60 countries to develop a global monitoring network that is as integrated as the planet it observes.

Relevant Web Sites
NOAA's Teacher at Sea Program

Ocean Etiquette: Promoting Responsible Encounters with Living and Submerged Cultural Resources in the Marine Environment

Dec. 15, 2005 — NOAA believes that encounters with animals and submerged cultural resources in the marine environment are a positive way to promote the conservation of and respect for marine resources. However, irresponsible human behavior can disturb animals, destroy important habitats, and result in injury to both marine animals and humans. For over a decade, the NOAA Fisheries Services' Office of Protected Resources and NOAA National Ocean Service's National Marine Sanctuary Program have been working to promote responsible marine wildlife viewing. Both offices launched various outreach programs to inform the public about responsibly viewing and interacting with marine life in conjunction with policies and regulations to prohibit marine mammal harrassment. At the same time, local level NOAA offices faced many challenges balancing visitor presence in the marine environment with appropriate measures to limit human disturbance. As a result, the NOAA offices had a shared need to develop a platform from which to instill a public stewardship ethic that would lead to individual ocean user awareness and actions to lessen impacts on the marine environment.

The Ocean Etiquette Program
As a result, NOAA Protected Resources and the NOAA National Marine Sanctuary Program created the Ocean Etiquette Program in 2004 to provide one NOAA voice in promoting responsible human behavior in the marine environment. The program champions policy and partnership development, as well as education and outreach initiatives for every kind of ocean visitor, whether they physically or remotely visit, work or play in the oceans and NOAA national marine sanctuaries.

The Future of The Ocean Etiquette Program
As the Ocean Etiquette Program continues to develop, anticipated products from this program include, but are not limited to:

- Consistent NOAA messaging and policy development that will be disseminated through the National Marine Sanctuary Program and protected resource programs nationwide,
- Handbooks with education and outreach tools and development protocols to promote best practices for ocean activities and
- Product development including pamphlets and other written materials, video PSAs, Web sites, teacher guides, children's activity books, commercial operator recognition programs and marine wildlife viewing guides.

The Ocean Etiquette Program is also working with each of the 13 marine sanctuary sites and corresponding NOAA Fisheries Service regional offices to develop additional outreach tools they need at the individual level. Also expect to see a national recognition program, beginning in the Florida Keys, for commercial boat operators who are in compliance with responsible viewing practices. In the meantime, people can support providers who promote responsible Ocean Etiquette. "We're committed to working cooperatively with commercial operators and local communities to develop safe and responsible wildlife viewing practices that protect marine wildlife and habitats, as well as people," said Stacey Carlson, NOAA Fisheries' Bottlenose Dolphin Coordinator for the Southeast Region, who has been part of the team helping to facilitate the community-based partnership between NOAA Fisheries, the Florida Keys National Marine Sanctuary and local operators to protect wild dolphins in the Florida Keys.

Read the full story at: http://www.magazine.noaa.gov/stories/mag185.htm

NOAA National Weather Service Unveils New Precipitation Web Page

Dec. 27, 2005 — High-quality precipitation analyses used for flood forecasts, drought monitoring and climate trends are being made available on the NOAA National Weather Service Web site on a trial basis through June 2006. During this time, comments regarding the service will be collected to determine whether it effectively meets users' needs and whether the service should be continued after the trial period.

Fine resolution precipitation data will help government agencies, river authorities, agribusiness, hydro-power utility companies and others make better, more cost-effective decisions about water management and the impacts of water surpluses and shortages. Emergency management agencies will be able to monitor impending flood conditions and conduct more effective operations during floods.

"Water resource managers can use this information to optimize water allocation to meet competing municipal, industrial and environmental demands," said Thomas Graziano, chief of the hydrological services program for the NOAA National Weather Service. "The emergency management community and the public at large can more effectively anticipate and respond to flood situations."

The precipitation analysis combines high resolution radar observations from 150 NOAA National Weather Service Doppler radars and measurements from more than 4,000 rain gauges. Data resolution is approximately 4 kilometers (2.2 miles), and the analysis is updated daily for the contiguous states and Puerto Rico. The Web site provides access to graphics of precipitation totals for the previous day, the last seven days, the last 14 days, the current month to date, and the current year to date. Graphics also are available comparing precipitation estimates to normal precipitation, as a percentage of normal, and departure from normal. Users have the option of downloading the information shown in these graphics in geographic information systems (GIS) format as well as in NetCDF, a format used widely within the meteorological community. Read the full story.

New Mississippi-Alabama Sea Grant Consortium Research Projects for 2006

From a field of 21 proposals, MASGC has chosen five research projects to fund for its next Omnibus cycle, which will run Feb. 1, 2006 to Jan. 31, 2008. Each project was chosen after reviewing several criteria including its relationship to MASGC's strategic plan and its significance to the scientific field it applies to. Details of these projects, summarized below, will soon be added to MASGC's website.

- With nitrogen enrichment of coastal waters becoming a world-wide environmental problem, Dr. Just Cebrian of the Dauphin Island Sea Lab is attempting to devise solutions to reduce the magnitude of the problem by presenting two new designs of black needlerush restoration as effective filters of nitrogen inputs into open coastal waters via groundwater. He has proposed a series of isotope enrichment experiments where the accumulation of the isotope into the different targeted pools will be assessed as groundwater travels through the rhizosphere of the restored marsh. These results will reveal for the first time whether black needlerush marshes can effectively filter groundwater nitrogen inputs and the processes responsible for that filtration.
- In an effort to protect and conserve saltmarshes and seagrass meadows, Dr. Jinx Campbell of The University of Southern Mississippi's Gulf Coast Research Laboratory and her team are investigating the presence and ecological role of mycorrhizal fungi in estuarine plant habitats found along the Mississippi

coastline. Determining the effect of the fungi's presence could help in seagrass and marsh restoration, survival, and function.

- Though the gray triggerfish is an important sport and commercial fish species in the northern Gulf of Mexico, little information exists on its reproductive biology and behavior. To unlock this mystery, as well as information on the ecology and biology of their early states, Dr. Steve Szedlmayer of Auburn University will study the competitive interaction of triggerfish and red snapper, two dominant co-occurring species on artificial reef structures in the northeastern Gulf with overlapping diets. No studies have examined the interactions between these two species. The study will broaden an understanding of reef fish communities, their interactions, and potential limitations of artificial reef structures.

- Moving ahead in a collaboration between The University of Alabama at Birmingham and Texas A & M University, Dr. Stephen Watts, professor in the Department of Biology at UAB, and Dr. Addison Lawrence, director of the Texas A & M Shrimp Mariculture Facility, continue to lay the groundwork for boosting the feasibility of building a land-based aquaculture system for Tripneustes ventricosus and other edible sea urchins which are a major component of marine environments found throughout the world's oceans. The promise of sea urchin farming would not only help to alleviate the over-fished sea urchin population and bolster the seafood industry, but has important biomedical applications and the ability for global economic impact.

- In initiating a starting point toward understanding the incremental impacts of human population growth and industrial development on fisheries productivity in the northern Gulf of Mexico, investigators Harriet Perry and Dr. Ralf Riedel of The University of Southern Mississippi's Gulf Coast Research Laboratory will develop a database using data from existing Mississippi monitoring programs. They will then analyze this data as well as a data set for Alabama utilizing innovative analytical techniques that will ultimately provide results applicable to management agencies for implementation of regulations and prioritization of research need.

New Poster Features Oyster Information

Posters of "The Eastern Oyster, The Reef Builder of Estuaries," were produced by the Mississippi-Alabama Sea Grant Consortium (MASGC) for distribution to Sea Grant Extension specialists, delegates of the Workshop on Molluscan Shellfish Safety, and other interested individuals. The 24 x 35-inch poster presents the ecology, life cycle, and the commercial importance of the eastern oyster, one of the few oyster species that can construct extensive reefs that, like corals, are primarily dead shell with a veneer of live animals. It also addresses the commercial and ecological importance of oysters. Sponsors of the poster include Marine Resources Division of the Alabama Dept. of Conservation and Natural Resources, Auburn University, Mississippi Department of Marine Resources, Mobile Bay National Estuary Program, and the University of South Alabama. A poster may be requested from MASGC by contacting John Grigsby at john.grigsby@usm.edu or 228-818-8837. Please ask for MASGP-05-033.

CSC Community Vulnerability Assessment Tool Highlighted

The Community Vulnerability Assessment Tool (CVAT), which is a step-by-step process for conducting a hazards risk and vulnerability assessment, was featured on the Community Risk Assessment (CRA) Toolkit ProVention Consortium Web site. The tool was developed by the Coastal Services Center (CSC) to help communities identify hazard risks and aid them in creating hazard mitigation plans. Because of a high demand for this information from developing countries, ProVention is developing a CD-ROM

containing toolkit material from different organizations. For more information, contact Tashya Allen. or view the toolkit at www.proventionconsortium.org/CRA_toolkit.htm.

In the Gulf States:

FEMA Hazard Mitigation Grants Help Florida Rebuild Stronger

Joint review speeds process, more than $17 million flowing to communities in record time

» FEMA's Hazard Mitigation Grant Program (HMGP) in Florida

ORLANDO, Fla. -- As Florida recovers from a historic eight hurricanes in a span of just fifteen months, funds provided through the Hazard Mitigation Grant Program (HMGP) will help communities rebuild stronger, the U.S. Department of Homeland Security's Federal Emergency Management Agency and Florida's Division of Emergency Management (FDEM) announced today. An innovative joint review process developed by FEMA and FDEM in the wake of the 2004 Hurricane Season has resulted in more than $17.3 million awarded for projects related to Hurricanes Charley, Frances, Ivan and Jeanne within a mere six months of the state's application deadline.

"We greatly appreciate FEMA's ongoing partnership in helping our communities to recover and rebuild after two record-setting seasons," said Florida Director of Emergency Management Craig Fugate. "Hazard Mitigation Grants allow local governments across the state to lessen the risk from future disasters, such as hurricanes, which are a fact of life that all Floridians must be prepared for."

Under HMGP, FEMA, in partnership with states, makes funding available to local governments and certain other organizations to undertake projects designed to lessen the risk of damage from disasters.

"In coastal states like Florida, where tropical systems may impact from June through November each year, time is of the essence in helping communities reduce their risk of damage," said FEMA's Director of Florida Long-Term Recovery Scott Morris. "HMGP is a valuable resource, which - due to the strong partnership between FEMA and Florida - we have been able to provide faster than ever before."

An independent study to assess the future benefits of hazard mitigation activities released last month by the National Institute of Building Science's Multihazard Mitigation Council found that although risk from national disasters cannot be eliminated completely, every dollar spent on mitigation can save as much as four dollars in response and recovery. Long-term improvements under the HMGP, as opposed to reimbursement under recovery programs, do take time. Projects must meet strict requirements under local, state and federal laws dealing with a variety of issues - from historic preservation to floodplain implications. The comprehensive reviews for technical feasibility, cost effectiveness, environmental coordination and compliance, and program eligibility are complex. But, prior to joint review, FEMA did not consider applications until the State's review was complete. The State had between 12 and 18 months from the date of the disaster declaration to review projects and submit them to FEMA.

Since FEMA and FDEM adopted the joint review process, 91 projects have already been approved a mere 14 months after the disaster declaration. As a result of the State and FEMA working closely together on HMGP review, the number of projects approved for Florida in this amount of time is unprecedented. Projects are approved based on priorities developed by local mitigation strategy committees and set by the state. In Florida, those priorities include, but are not limited to:

- Strengthening public facilities - which often serve as first responders' bases of operations during disasters;
- Strengthening commercial structures - often the backbone of communities' local economies; and
- Residential acquisition - acquiring homes that have suffered repetitive losses and are in harm's way for future disasters.

Following the devastation of the 2004 hurricane season, a record $359 million was set aside for HMGP, a program offered by FEMA and administered by FDEM. FEMA has received more than 800 applications for the HMGP following the 2004 season - another record. The HMGP is administered by the state, with projects funded 75 percent by FEMA and 25 percent by the applicant. Applicants include the State of Florida, local governments and private non-profits. Most applications are for wind retrofit, elevation, acquisition and demolition, and drainage projects.

More than ninety projects have been funded so far statewide and in the following 25 counties: Alachua, Brevard, Citrus, Clay, DeSoto, Hardee, Hernando, Highlands, Hillsborough, Holmes, Indian River, Lake, Lee, Manatee, Martin, Miami-Dade, Okaloosa, Orange, Palm Beach, Pasco, Pinellas, Polk, Sarasota, St. Johns and Volusia. Among projects funded are 63 wind retrofit projects totaling nearly $6.2 million, including: More than $890,000 for Hernando County's Emergency Operations Center; More than $870,000 for Martin County's Public Safety Complex; and More than $723,000 to retrofit fire and police stations throughout the state.

Also funded are 21 acquisition projects of vulnerable structures totaling more than $3.9 million, and another $7.2 million have been awarded to the state for measures such as: Supporting the state's ability to manage the HMGP; Evaluating resources needed at special needs shelters; and Educating the public about natural hazards through a partnership with the Federal Alliance for Safe Homes (FLASH) and Disney's Epcot. For more information on HMGP and Florida's joint review process, please see the attached fact sheet and visit www.floridadisaster.org or www.fema.gov.

» Detailed list of approved projects by county (XLS 68KB)

FDEP Appoints Stephanie Bailenson as Director of the Office of Coastal and Aquatic Managed Areas

TALLAHASSEE – Florida Department of Environmental Protection (DEP) Secretary Colleen M. Castille today welcomed Stephanie Bailenson as the head of the Office of Coastal and Aquatic Managed Areas (CAMA). CAMA manages coastal lands and waters that have been designated as Aquatic Preserves, National Estuarine Research Reserves and the Florida Keys National Marine Sanctuary. “The Department is pleased to appoint Stephanie Bailenson as head of its CAMA office, where her education and experience will bring knowledge and insight to our endeavors. Her expertise with marine science, ocean policy and management will strengthen our efforts to protect the State’s coastal resources,” said DEP Secretary Castille.

Bailenson comes to DEP from the National Oceanic and Atmospheric Administration, where she served as Senior Policy Advisor to the Under Secretary of Commerce for Oceans and Atmosphere for more than three years. Prior to that she worked for four years with the United States Senate Committee on Commerce, Science and Transportation. Bailenson attended graduate school in the Department of Zoology at the University of Hawaii and received her Bachelor’s Degree in Biology/Political Science, with Distinction, from Duke University. “I am eager to continue Florida’s success and leadership in the realm of ocean resource protection,” Bailenson said. “I look forward to advancing the Governor’s Oceans

Initiative through strong participation in the Gulf of Mexico Alliance and the continued protection and public education of Florida's aquatic preserves."

Recognizing the need to enhance science-based ocean management, Governor Jeb Bush is advancing state-of-the-art coastal observation technologies, expanding recreation and ocean education, conducting marine resource assessments and increasing protection for seagrass beds, fisheries and coral reefs through Florida's Oceans Initiative. With a $2 million investment set aside by Governor Bush and the Florida Legislature, the Oceans Initiative is merging science and research with environmental management to safeguard Florida's valuable ocean resources and sensitive coastal areas.

Drawing millions of visitors each year, Florida's clear waters, world-class beaches and coral reefs support a $53 billion tourism industry, a $14 billion marine industry and a fishing industry that injects more than $8.5 billion a year into Florida's communities. With the longest coastline in the contiguous United States, Florida is home to 41 aquatic preserves, three of the nation's National Estuarine Research Reserves and one of the largest underwater refuges in the world. To learn more about Florida's Oceans Initiative, visit http://www.dep.state.fl.us/secretary/news/2004/ocean/default.htm.

LDNR and LSU Build Vessel to Conduct Marine Surveys

The Coastal Profiler is its name and surveying is its game. The custom-made research vessel constructed by the state Department of Natural Resources (DNR) for the Coastal Studies Institute (CSI), Louisiana State University, will enhance the state's capabilities of conducting marine surveys. It was first launched one day before Hurricane Katrina hit but was celebrated in October of this year when it was turned over to LSU's institute to be used for gathering marine research information.

The idea of investing in a shallow-draft boat for sonar mapping in shallow bay areas along the coast began with DNR geologist Syed Khalil, who works in the coastal restoration division. After presenting a proposal to DNR Deputy Secretary Randy Hanchey in 2004, construction started soon thereafter with assistance from Dr. Harry Roberts of CSI at LSU.

According to Khalil, the research vessel is equipped with state-of-the-art geophysical instruments needed for geophysical surveys (DGPS, fathometer, sub bottom profiler, side scan sonar). It also features the latest sub-bottom profiler for seismic survey.

The boat is 41 feet long and 16.5 feet wide with 3 feet of draft run by two 450 HP engines. The cost of the Profiler was $320,000 provided by the Coastal Impact Assistance Program (CIAP) fund. This vessel can operate in the shallow water of the bays as well as the deeper waters the Gulf of Mexico. Khalil says the vessel will pay off its construction cost within a few years, and it will be available when needed avoiding the need to contract out for a boat.

The Coastal Profiler will conduct marine geophysical surveys for exploration of offshore sand much needed for coastal restoration. In addition, surveys will be taken to delineate oyster leases, or for identifying faults or locating where pipelines are. The evaluation of sand resources from Ship Shoal is among the first surveys to be undertaken by the new vessel.

Mississippi Governor's Commission to Release Final Report

January 6, 2006- Final Report Letter – Governor's Commission Recovery, Rebuilding, Renewal Chairman Jim Barksdale

As promised, the Governor's Commission on Recovery, Rebuilding, and Renewal delivered its final report to Governor Haley Barbour before the end of the year that saw Hurricane Katrina devastate so much of South Mississippi. This undertaking was simply the greatest outpouring of public spirit and unselfish labor I've ever experienced.

The report is titled After Katrina: Building Back Better than Ever. It is 190 pages in length, and it contains over 200 separate recommendations. It is the product of three months of intensive research and public discussions. The Commission called upon the talents of more than 500 volunteers who contributed more than 50,000 hours to the effort. Dozens of town hall meetings gave local citizens the opportunity to voice their views of what their region should become. Eleven committees addressed specific areas of concern from agriculture and forestry to defense contracting to the future of tourism.

About content – The final report presents the committees' assessment of hurricane damage and their recommendations for not only restoring what was lost but for doing it in a way that responds to the governor's charge to build back "better than ever." Among the committees' recommendations are proposals for at least partially regionalizing transportation policy, some public services, and tourism development efforts. There are strong arguments for building and zoning codes that not only require safer structures and more storm-aware development patterns but that also encourage more pedestrian-friendly streets and a better mix of commercial, office, and residential uses in rebuilt neighborhoods. The Finance Committee report includes suggested ways communities can tap into federal, state, and private funding sources to accomplish some of the report's goals, and there's an authoritative analysis of what leaders and citizens must think about to prepare for other major storms.

You can read my introduction to the Commission's report by using the following link: www.governorscommission.com/final/Intro.html. With the delivery of this final report, the research and recommendation phase is over. Now it's up to the communities to consider and act on these recommendations. After listening to all those voices and embracing their deepest concerns, it would be unconscionable if their hopes go unrealized because their leaders failed to make the hard choices and commit the full resources necessary to move from great ideas to meaningful action. A few words about distribution – By midweek next week, the complete report and all supporting documents will be available on the Commission website: www.governorscommission.com. In about a week to ten days after that, printed versions of the Commission's final report will be distributed to officials in the hurricane-affected areas, to Commissioners and others.

I again want to thank everyone who gave so much to make this unprecedented effort possible. When people look back twenty and thirty years from now, they will see a region that is better off due to the work we have all done together.---Jim Barksdale

Mississippi Governor's Commission Releases Rebuilding Book

As a result of the leadership of the *Governor's Commission on Recovery,Rebuilding and Renewal* and the efforts of many talented professionals, A Pattern Book for Gulf Coast Neighborhoods is now available. This valuable tool marks a new beginning in the rebuilding efforts of our residents and businesses throughout the Gulf Coast region. While many of our most loved places have disappeared, we are

compelled to rebuild the Coast in a time- honored way. To ensure that this effort is properly performed, I urge builders to use this pattern book in their efforts. It will not only result in beautiful buildings, but also strong and well- protected homes and businesses. A Pattern Book for Gulf Coast Neighborhoods follows the tradition of American town building by providing practical tools and resources for small builders, homeowners and suppliers. In an effort to conserve and restore the sense of place that is specific to each locality, this book provides a kind of DNA code for our communities and our inherited architecture. Pattern books have been in use since ancient Roman times, and the British brought the idea to the American colonies, where pattern books remained a common town-building tool through the first half of the 20th Century. Within this pattern book is a resource that offers general direction for character retention that should be used in both renovation, as well as new construction opportunities.

MDEQ to Receive Brownfields Job Training Grant for Coastal Counties Hit Hardest by Hurricane Katrina

(JACKSON, Miss.) – The U.S. Environmental Protection Agency (EPA) has recently announced the selection of the Mississippi Department of Environmental Quality (MDEQ) to receive a $200,000 brownfields job training grant. This new grant will be used to teach environmental-cleanup job skills to individuals living in the six coastal counties of Mississippi most ravaged by Hurricane Katrina.

The 576-hour training program will include courses in Hazardous Waste Operations and Emergency Response (HAZWOPER), construction skills, hazardous materials handling, introduction to underground storage tanks, lead and asbestos abatement, refresher courses, and field work. Students will be recruited from among residents of the six coastal counties impacted by Hurricane Katrina.

“We are pleased these grants will be used to train people for real jobs that will be of long-lasting importance. This training will not only enhance people’s job skills but will also aid the restoration of South Mississippi,” said Charles Chisolm, Executive Director of MDEQ.

The Brownfields Job Training Program is designed to provide individuals in brownfields-affected communities an opportunity to obtain employment in the environmental field, ensuring that the economic benefits derived from brownfields redevelopment remain in the affected communities. Since 1998, EPA has nationally awarded over $20 million in brownfields job training funds, more than 2,600 people have completed training programs, and more than 1,600 have obtained employment in the environmental field, earning an average wage of $13 per hour.

The details of MDEQ’s implementation of the grant funds and the application process for people interested in environmental clean-up training will be determined over the next few months. For more information, please contact Trey Hess at MDEQ, 601/961-5654.

EPA's Brownfields program encourages redevelopment of America's estimated 450,000 abandoned and contaminated waste sites. Since the beginning of the Brownfields Program, EPA has awarded more than 850 assessment grants totaling approximately $220 million, over 200 revolving loan fund grants totaling more than $183 million, and more than 230 cleanup grants totaling approximately $42 million. EPA's brownfields assistance has attracted more than $7.2 billion in private investment and helped attract more than 34,000 jobs.

Other News

Gulf Water Sampling Results

(Washington, D.C.-Jan. 6, 2006) Test results from Gulf of Mexico sampling indicate that at most, relatively low levels of fecal contamination were present after the hurricane. The Clostridium perfringens tests show that the levels were low to undetectable. Previously released enterococcus tests show that at the time of sampling the water was appropriate for any kind of recreational use--including swimming. Water samples were collected by the OSV Bold in the Gulf from Sept. 27 through Oct. 2, 2005 at monitoring stations in the river channels and nearshore waters surrounding the Mississippi Delta. The agency monitored 20 areas to determine whether fecal pollution from flooded communities had spread into these waters.

Clostridium perfringens is a bacterium, found in the intestinal tract of both humans and animals. It enters the environment through feces. There are no EPA health-based ambient water quality criteria for C. perfringens. Therefore, there is no approved analytical method for assessing water quality using this bacterium. However, some scientists recommend using C. perfringens spores as a tracer of fecal pollution because its presence is a good indicator of recent or past fecal contamination in water and spores survive well beyond the typical life-span of other fecal bacteria.

EPA previously released results for enterococcus, which was detected at four of 20 stations from 10 to 53.1 bacteria colonies per 100 milliliters. These results indicate that the water is suitable for any kind of recreational use. This level is below the most conservative marine water criteria of 104 bacteria per 100 milliliters.

It is difficult, due to absence of previously analyzed data, to determine the source of the C. perfringens and enterococci. They could have been present prior to the hurricane. Bacteria were not routinely analyzed prior to Hurricane Katrina. While all of these results are encouraging for recreational uses, this data should not be used to assess the safety of consuming raw or undercooked molluscan shellfish--such as oysters--because accidental ingestion of water presents different risks than eating raw or undercooked shellfish. The data being released today is available at: http://www.epa.gov/katrina/testresults/water/index.html#surface and information about EPA's survey vessel the Bold is available at: http://www.epa.gov/bold. Contact: Eryn Witcher, 202-564-4355 / witcher.eryn@epa.gov.

EPA Commits $10 Million to Protect the Nation's Beaches

(Washington, D.C.-Jan. 5, 2006) In order to get a jump start on the 2006 beach season, the Bush Administration announced 30 states and five territories will share $10 million in EPA grants for beach water quality monitoring and notification programs. During the past six years, EPA has provided nearly $52 million under the Beaches Environmental Assessment and Coastal Health Act (BEACH) of 2000 to states with shorelines along the nation's ocean coasts or around the Great Lakes.

"While most of us are not thinking about hitting the beach in January, this funding will ensure that families are better protected when heading to their vacations this summer," said EPA Administrator Stephen L. Johnson. "These grants are an integral part of the Administration's Clean Beaches Plan, improving water quality and keeping the public informed."

Beach water monitoring helps identify actions needed to reduce pollution, such as warnings and closures, when bacteria concentrations reach unsafe levels. In addition, as part of the Clean Beaches Plan, EPA is working on new technologies that will provide faster test results, enabling local health agencies to determine more quickly if a beach should be open for swimming.

Grants are available to eligible coastal states and territories based on the length of beach season, the miles of beach and the number of people who use that beach. In addition, money will be made available to eligible Indian tribes who apply. The grants, which cover a five-year period, will be awarded early this year. States and territories must make formal application to receive their allotted funds.

The BEACH Act of 2000 requires coastal states and territories to adopt up-to-date pathogen criteria to protect beach goers from harmful bacteria. Information about EPA's beach program, grant information and a list of eligible states, territories and available 2006 funds can be found at: http://www.epa.gov/waterscience/beaches/grants. Contact: Eryn Witcher, 202-564-4355 / witcher.eryn@epa.gov.

Watershed Handbook Released

(Washington, D.C.-Jan. 6, 2006) EPA's Office of Water has published a guide to watershed management as a tool in developing and implementing watershed plans. The draft Handbook for Developing Watershed Plans to Restore and Protect Our Waters is aimed toward communities, watershed groups, and local, state, tribal, and federal environmental agencies. "This handbook will help anyone undertaking a watershed planning effort, but it should be particularly useful to persons working with impaired or threatened waters," said EPA Assistant Administrator for Water Benjamin H. Grumbles.

The 414-page handbook is designed to take the user through each step of the watershed planning process:

- watershed monitoring and assessment
- community outreach
- selection and application of available models
- best management practices
- effectiveness data bases
- implementation
- feedback
- plan adjustment

The handbook is intended to supplement existing watershed planning guides that have been developed by agencies, universities, and other nonprofit organizations. This handbook is more specific than other guides about quantifying existing pollutant loads, developing estimates of the load reductions required to meet water-quality standards, developing effective management measures, and tracking progress once the plan is implemented.

EPA is making this draft document widely available with the purpose of having it used and tested by a variety of watershed partnerships, whose advice will be considered in developing the final version. Comments should be addressed to watershedhandbook@epa.gov no later than June 30, 2006. The draft handbook is available online at: http://www.epa.gov/owow/nps/watershed_handbook. You can order a free copy from the National Service Center for Environmental Publications by calling 800-490-9198 or e-mail ncepimal@one.net. When ordering, refer to EPA document number EPA 841-B-05-005.

More than $15 Million in Coastal Grants will go to 12 States, Interior Secretary Announces

Alabama, Georgia to receive grants in Southeast

The U.S. Fish and Wildlife Service will award more than $15 million in grants to 12 states to help conserve, restore and protect coastal wetlands, Interior Secretary Gale Norton announced today. In the Southeast, Georgia and Alabama will each receive $928,000 under the National Coastal Wetlands Conservation Grant Program. In Alabama , funding from the grant will help purchase the Point Caddy Wetlands, on Grand Bay in the Mississippi Sound. In Georgia, the grant money will contribute to the acquisition of 1,250 acres and 4.5 miles along the Altamaha River. Other States to receive funding from the Coastal Grants program in fiscal year 2006 include Alaska, California, Hawaii, Illinois, Maine, Massachusetts, Michigan, New Jersey, Texas and Washington.

The grants provide funding for 19 projects and will be supplemented with more than $12 million from state and private partners. The grants are used to acquire, restore or enhance coastal wetlands for long-term conservation benefits to wildlife and habitat. Partners in this year's projects include state and local governments, private landowners and conservation groups such as The Nature Conservancy, Ducks Unlimited, Scenic Galveston , Inc., Wildlife Forever Foundation, and many others. "When people at so many different levels come together in these kinds of projects, everybody wins," Norton said. "This is the kind of effort that makes it possible for us to leave a real legacy for our children and grandchildren."

National Coastal Wetlands Conservation grants are awarded to states through a competitive process. The program is funded under provisions of the 1990 Coastal Wetlands Planning, Protection and Restoration Act, with money generated from excise taxes on fishing equipment and motorboat and small engine fuels. "These are win-win projects," said Service Director Dale Hall. "I'm very excited when we're able to leverage the taxpayer dollar with our partners and get a lot more value for the money."

For more information, contact the National Coastal Wetlands Conservation Grant Program, U.S. Fish and Wildlife Service, 4401 North Fairfax Drive , Arlington , Virginia 22203 , or Division of Federal Assistance, U.S. Fish and Wildlife Service, 4401 North Fairfax Drive , Arlington , Virginia 22203 , or visit the program's home page at http://www.fws.gov/coastal/CoastalGrants/.

Fiscal Year 2006 National Coastal Wetlands Conservation Grant Project Proposals in Alabama

Point Caddy Wetlands. The Alabama Department of Conservation and Natural Resources will purchase 1,730 acres on Grand Bay in the Mississippi Sound. Another 239 acres are being provided as match. The Grand Bay wetlands provide habitat to recreationally important fish species like spotted sea trout, red snapper and red drum and coastal-dependent and migratory birds. Partners: The Nature Conservancy of Alabama and the Mobile Bay National Estuary Program.

Florida Manatee Deaths Jump 30 Percent in 2005

January 06, 2006 — By Kelli Kennedy, Associated Press

ORANGE CITY, Fla. — Sweet Gum was fatally injured by a racing boater. Her calf, Rachel, was also killed by a boat near Lake Monroe, and so was her granddaughter, Ruby. This year has been a hard one for the state's endangered manatee population. Despite educational programs and campaigns targeting boaters, the number of confirmed manatee deaths in Florida jumped 30 percent during the first 11 months of 2005, according to state officials. The Florida Fish and Wildlife Commission estimated 366 manatees died through Dec. 9, 2005 compared to 276 deaths in 2004. The agency was expected to release final figures for 2005 next week. Some experts attribute the spike to the toxic effects of red tide, an aquatic phenomenon caused by an unpredictable algae bloom that can sicken and kill sea life when it is ingested. This year was an unusually active year for red tide in the Gulf. It was most the active year since 1996, when a red tide bloom brought the statewide death toll to more than 400.

"We had a very severe year for red tide," said Cynthia Heil, a senior research scientist for the Florida Fish and Wildlife Commission who monitors red tide statewide. "When red tides occurs in March, the manatees are especially threatened. This year the bloom started as early as January." But animal activists at Save the Manatee Club are more concerned about another cause.

"The largest known cause of manatee deaths is from collisions with boats," said Judith Vallee, executive director of Save the Manatee, a nonprofit advocacy group. "We have no control over red tide or cold deaths so we try to focus on the deaths we can prevent." Educating boaters about obeying speed limits and looking out for swirls in the water where manatees might be swimming are key, Vallee said. The organization encourages property owners to post big, yellow "Please Slow, Manatees Below," signs which urge boaters to obey the speed limits. "Boats aren't just killing manatees, they're actually maiming them," said Vallee, who sees dozens of manatees each week who have been severely injured by watercraft propellors. "And somehow that message is being lost on the public."

Animal activists fear the current manatee population of 3,200 in Florida will continue to decrease. Increased development along Florida's waterways coupled with pollution and a lack of protective measures for the endangered species are to blame, Valee said. In June, the state is also considering downgrading manatee's endangered status based on a new criteria. "The criteria is extremely flawed. Manatees still very much need protection," Vallee said. "They're not ready to come off that list and as the threats are increasing, manatees are in even more danger.

At Blue Springs Park, Wayne Hartley refers to each manatee like a pet: Phyllis' new calf, Lenny's shrimpy size, Deep Dent's maimed tail. As the Park Service Specialist at Blue Springs State Park in Orange City, Fla., Hartley has gotten to know each one by name. The park's constant temperature of 73 degrees makes it the most popular stop in Florida for manatees during winter months. The manatees are recognized by their scar patterns from boat accidents, said Hartley, who is responsible for a daily head count. Today they are about 36,and on Wednesday there were more than 100. The park shows visitors a 16-minute educational clip on manatees and boater safety. "It's the one thing we can actually do something about," Hartley said. "Obey the laws. If you're going to run fast, stay in the middle of the channel because the manatees spend more time on the edges where the grass is."

On a recent afternoon at Blue Springs, a group of about seven sea cows huddled together near a sunny patch of shallow water. The manatees are the main attraction at the state park, Hartley said. Visitors love to watch the sometime playful, but usually lazy sea creatures. "They're gentle and curious because they

want to know about you," said park visitor Rick Privette, who often watches manatees during scuba diving trips around Florida. "They're a blast. They're fun to watch and they're not scared of you."

MMS Ocean Science Magazine Explores the Depths of Ocean Research

Earlier this year, hurricanes wrought a tremendous amount of destruction on the Gulf Coast, both onshore and offshore. This issue of Ocean Science Magazine takes a closer look at some of the destruction, the measures in place to reduce the impacts, and the lessons learned to prepare for future events.

Energy

Debate Swirls as Wind Power Grows Rapidly

January 09, 2006 — By John Christoffersen, Associated Press

STAMFORD, Conn. — Giant windmills -- on scenic mountain ridges, prairie grass and even an Indian reservation -- are spinning an unusual debate that is dividing leading environmentalists. Wind power grew rapidly in 2005, becoming more competitive as natural gas prices jumped and crude oil prices reached record highs. Improved technology, a federal tax credit and pressure on utilities to use clean energy sources helped fuel the growth from coast to coast. But wind energy is posing a dilemma for environmentalists who support its pollution-free electricity but have grown increasingly alarmed at its death toll on birds and bats.

Officials in Atlantic City, N.J., dedicated the nation's first coastal wind farm last month, while Fairfield-based General Electric Co. announced a startup near San Diego of the largest wind power farm on Indian land. The industry added about 2,500 megawatts of wind power last year, a record 35 percent increase, according to the American Wind Energy Association, an industry trade group. The country's wind capacity is more than 9,200 megawatts in 30 states, enough for 2.4 million average U.S homes. Wind power still makes up less than 1 percent of the nation's electricity, but experts expect wind to generate at least 5 percent by 2020.

"The wind resource in the United States is comparable to the oil resource in Saudi Arabia," said Tom Gray, deputy executive director of the association. "It's a major strategic national resource we should be making every effort to develop." The environmental debate has intensified as the first offshore projects are proposed in popular tourist areas, such as Cape Cod, Long Island, N.Y., and the New Jersey shore. Critics, including a member of the influential Kennedy family, worry that some projects could harm national treasures. "All of a sudden you're transferring an asset used by 5 million people into the hands of private industrial speculators," said Robert F. Kennedy Jr., an environmentalist who has objected to the Cape Cod proposal. "If you're giving away public rights, you ought to make sure the public benefits from this transfer, that the costs do not exceed the benefits."

Kennedy's stance has put him at odds with the environmental organization Greenpeace, which last August sent boats to interrupt a visit by Kennedy. Supporters say the project would meet the region's energy needs in an environmentally friendly way. Conservationists also have wrestled with the wind farms. In Kansas, conservation groups have asked state officials to create guidelines for wind energy developments,

citing concerns that more wind farms will harm the last remnants of the nation's prairie grass and prairie chicken populations.

"We feel rather protective of that area and feel it is a real national treasure," said Alan Pollom, Kansas state director of The Nature Conservancy. "If we're really going to capture the benefit of green power, it seems ill considered to pursue it in such a manner that you create offsetting detrimental ecological impacts." In September, a report by the Government Accountability Office, Congress' investigative arm, found that the federal government offers minimal oversight in approving wind power plants. The report urged federal officials to take a more active role in weighing the impact of wind power farms on bird and bat deaths, saying local and state regulators sometimes lack the necessary expertise.

Wind projects have sparked complaints around the country that the windmills cause noise, obstruct scenic views and kill wildlife, including thousands of federally protected birds in California. In Maryland, state officials have sought to limit 420-foot windmills atop the state's highest mountain ridge because of concerns about the impact to rare species. A proposal to build offshore wind turbine towers along the New Jersey shore led to a 15-month moratorium on such projects while a special panel studies the issue. A wind farm planned in a small town in Vermont has sparked criticism that the nearly 400-foot towers would ruin the rural landscape and hurt tourism.

Proponents say bird kills have been minimal at most wind farms, though Gray acknowledged some bird deaths. They say the visual impact is far less severe than other forms of energy such as oil drilling. Wind power helps lower skyrocketing home heating and electric bills by reducing the demand for natural gas and brings new jobs, rural economic development, and tax revenue to cash-strapped states, proponents say.

In McCamey, Texas, Mayor Sherry Phillips said the population has dwindled over the decades from about 10,000 to 1,800 as oil dried up. But these days the area is remaking itself as the wind farm capital of Texas, collecting millions of dollars in taxes and creating 40 to 50 jobs from 860 wind turbines, she said. "It's extremely important economically for us," Phillips said. "To me they're a pleasing sight."

The wind power added this year will offset the emission of approximately 7 billion pounds of carbon dioxide, equivalent to keeping nearly 500,000 SUVs off the road, the association said. "If we could just find a way to make them invisible," Gray said, "we'd have something everybody could get behind."

Training and Conferences

2006 Growth Management Summit

Save the Dates! May 18-19, 2006

The Department of Community Affairs and the Florida Regional Councils Association announce the 2006 Growth Management Summit to be held on May 18-19, 2006, at the Rosen Plaza in Orlando. The registration brochure and program will be distributed in March. The anticipated registration fee is $175, which will include two breakfasts, two lunches, and a reception the evening of May 18. The hotel block rate is $99. Please monitor this website for the latest information.

What began in the mid-1980s as an annual meeting of Department and regional planning council DRI coordinators has evolved into a two-day event featuring land use planning and growth management-related topics. Co-hosted by the Department and the Florida Regional Councils Association, attendees

include state, regional and local government planners, budget officers, elected officials, school board members, consultants, and others involved in the implementation of Florida's Growth Management Act (Chapter 163, Part II, Florida Statutes). For more information about the workshops, please contact: Vicki Morrison,Office of Public Affairs;850/922-1815, SC 292-1815; vicki.morrison@dca.state.fl.us.

2006 Florida Governor's Hurricane Conference

The 2005 Hurricane Season has been extremely active and has created even more unprecedented challenges and destruction. Records have already been set for the months of June, July and August, not only in terms of the number of named storms, but also major hurricanes. The Panhandle was hit by category three Hurricane Dennis in July, and fortunately damage was not as severe as that from Hurricane Ivan in 2004. In August, Southeast Florida was hit by Hurricane Katrina as a category one hurricane that later became a category five in the Gulf of Mexico, one of the strongest on record. Katrina then made landfall on the Gulf Coast as an intense category four, further affecting the Panhandle with tropical storm force winds and high water, while causing massive devastation and loss of life in Louisiana, Mississippi and Alabama.

The Program Committee has been directed to develop a program that will again address the training needs of those new to the emergency services community and also present the lessons learned from the 2004 and 2005 hurricane seasons from a variety of perspectives, to include the experiences of Hurricane Katrina from the Gulf Coast. The presenters will include representatives from first responders to federal officials, local and national disaster agencies and private business. They will share with you the good, bad and ugly of preparing for, responding to and recovering from a hurricane.

Location: Greater Fort Lauderdale / Broward County Convention Center, Florida, USA
Dates: May 8-12, 2006
Early Registration Deadline: March 31, 2006
Contact Information: Governor's Hurricane Conference PO Box 279 Tarpon Springs, FL, USA 34688
Phone: +1 727-944-2724 or +1 800-544-5678 Fax: +1 727-944-2687
Home Page URL: http://www.flghc.org/

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